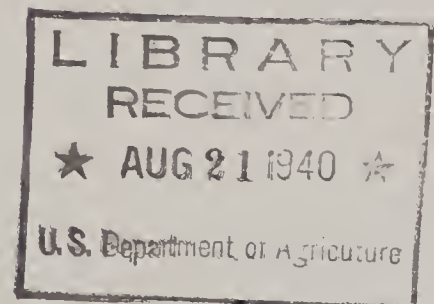


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Your County's Land Use Planning Committee



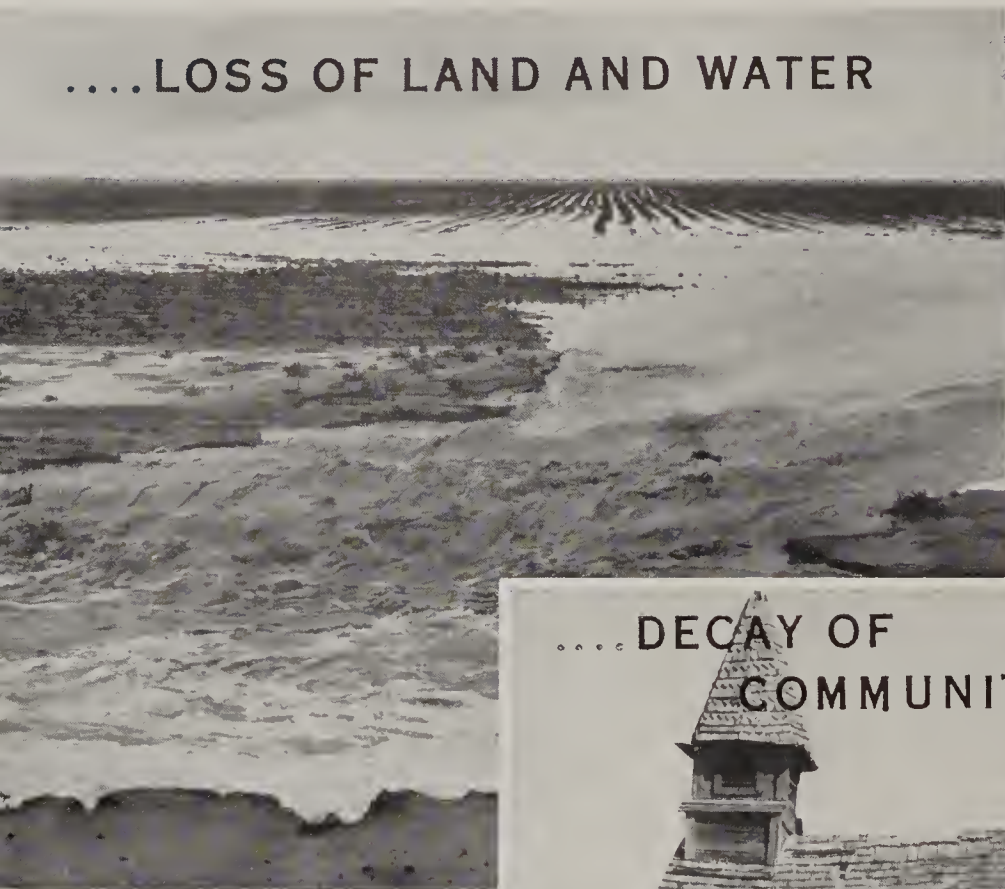
IS AT WORK FOR YOU

U.S. Bureau of Reclamation

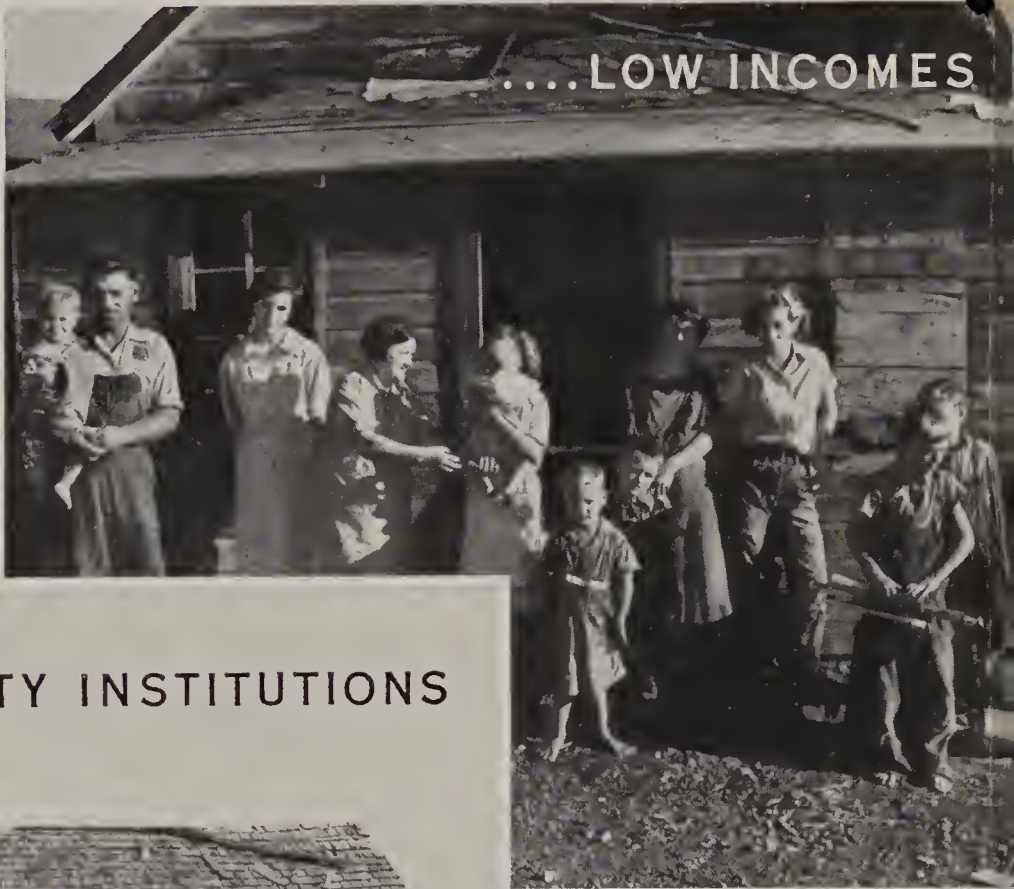
BAE-EXT FLIER-1
USDA

THIS COMMITTEE IS LOOKING AT

....LOSS OF LAND AND WATER



....LOW INCOMES



....DECAY OF
COMMUNITY INSTITUTIONS



....WASTE OF
PUBLIC FUNDS



...HEALTH
CONDITIONS



....AND PROPOSING ACTION TOWARD

A
RICHER
LIFE



ON
BETTER
LAND

FOR
MORE
OF THE
PEOPLE



....IN YOUR COUNTY

U. S. D. A.



HELP YOUR GOVERNMENT
TO HELP YOU AND YOUR
NEIGHBORS
ASK YOUR COUNTY AGENT ABOUT
YOUR LAND USE PLANNING COMMITTEE



LOADING MILK FOR ALLIES

FEEDING TO PRODUCE

More Milk for Victory



GRAIN FROM THE EVER-NORMAL GRANARY WILL PRODUCE MORE MILK

THE UNITED STATES needs more milk to help win victory. Billions of pounds more in 1942 than in 1941. More dairy products for its defenders, its children, and its Allies.

How can you produce your share of this additional milk? You can profitably keep a few cows you would normally cull out. You can reserve for human consumption some of the milk now being fed to livestock. Some increase in milk production can be brought about by improving the quality of roughage and of pastures. But most of the extra milk must come from heavier feeding of grain, balanced with sufficient protein.

How much more milk can you get by heavier feeding? How much more grain will it pay you to feed?

The Department of Agriculture, in cooperation with 10 State Experiment Stations, has just completed experiments that help to answer those questions.

Each additional 100 pounds of grain fed in the experiments produced additional milk, but not quite so much more as the 100 pounds before it. On an average, the increase in production was about 100 pounds of milk for an extra 100 pounds of grain, but it ranged from about 150 pounds more milk at the lightest rates of feeding grain down to 60 pounds more milk at the heaviest rates of feeding. Even the

heaviest rates of feeding may be profitable if the additional milk is worth more than the additional grain. From information obtained in these experiments table 1 was constructed, indicating roughly how much grain should be fed to obtain the greatest total return above feed costs under different price conditions.

But now you say, "What if I'm feeding more roughage than was used in the table?"

If the difference is very great, you can make a rough adjustment by figuring that around $2\frac{1}{2}$ pounds of silage is equal to 1 pound of hay, and $1\frac{1}{2}$ pounds of hay is just about equal to 1 pound of grain, in feed value.

If your cows are on pasture the grain figures in table 1 may not hold good during the first month or two when the pasture is at its best. But they should be reasonably accurate the rest of the year.

It is important to note that daily rates of feeding in table 1 are all based on annual averages. Actually, of course, a cow may not be able to eat enough grain to keep up to average early in the lactation period when she is producing abundantly, and you may want to feed more than is indicated when production slumps off, late in the season.

You can best serve the war effort and yourself by feeding your cows the very last pound of grain on which you can still make a profit.

TABLE 1.—Suggested quantities of grain to be fed per cow, daily, under varying price conditions ¹

Section A. Daily production of milk, testing				Section B. Quantity of grain to be fed when grain price is—				
3½% fat	4% fat	4½% fat	5% fat	1½ times milk price	1¼ times milk price	Same price as milk	Three-fourths of milk price	One-half of milk price
Pounds milk	Pounds milk	Pounds milk	Pounds milk	Pounds grain	Pounds grain	Pounds grain	Pounds grain	Pounds grain
11	10	9	8	2	2	2	3	4
17	15	14	12	4	4	5	6	7
22	20	18	16	6	6	7	8	10
28	25	23	21	8	8	9	11	13
33	30	27	25	10	11	12	13	16
39	35	32	29	12	13	14	16	19
45	40	36	33	14	15	16	19	22
50	45	41	37	16	17	19	21	25
56	50	45	41	18	19	21	24	
61	55	50	45	20	21	23		
67	60	54	49	21	23			
						Feeding over 25 pounds is rare in commercial herds		

¹ The suggested number of pounds grain to be fed is in addition to 1.8 pounds of good hay per 100 pounds live-weight, daily, or its equivalent in other roughage (18 pounds for a 1,000-pound cow). This is equal to 2 pounds of ordinary hay per 100 pounds of liveweight (20 pounds for a 1,000-pound cow).

Directions for using the table: (1) Divide the local price of 100 pounds of grain by the price at the farm of 100

pounds of your milk. (2) Locate the column in section A nearest the percentage of butterfat in your cow's milk. (3) Follow that column down the page to the figure nearest the number of pounds milk each cow is producing daily. (4) Follow that same line across the page to the column in section B that comes nearest to representing the local relationship between grain prices and milk prices. (5) There you will find the number of pounds of grain you will need to feed daily per cow to get the greatest total return for your milk over the value of the grain fed.

MILK FOR AMERICA'S ALLIES, ITS SCHOOL CHILDREN, ITS WAR WORKERS, AND ARMED FORCES





YOU CAN MEET YOUR MILK GOAL BY FEEDING MORE GRAIN

TABLE 2.—*How to meet your milk goal through increased grain feeding*

Approximate percent increase in milk production wanted	Percent more grain you will need to feed to meet goal, if you are now feeding grain according to the amount of milk produced, at one of the following rates ¹			
	1:4	1:3½	1:3	1:2½
Percent	Percent	Percent	Percent	Percent
5	11	11	12	14
10	23	23	26	31
15	35	36	41	
20	48	51	59	
25	62	67	80	
30	78	84		

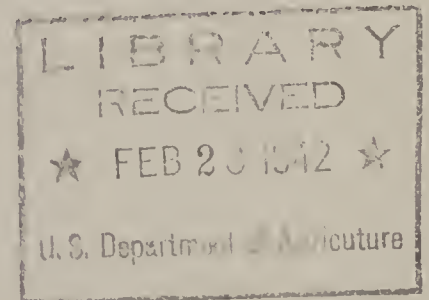
¹ 1:4 means 1 pound of grain fed for each 4 pounds of milk produced, etc. This table is based on milk containing

4 percent butterfat, and on grain fed in addition to 20 pounds of ordinary hay daily per 1,000-pound cow.

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Ec7Bae
no. 3



YOU CAN HELP BY GROWING PEANUTS



PEANUT OIL AND THE WAR

BAE-EXT FLIER-3
USDA



THEY WILL SPEED VICTORY

SOW A COVER CROP BEFORE HARVEST

Southern farmers can help defeat the Axis by growing more peanuts in 1942. Peanut oil is needed - all we can produce - to meet wartime needs and to replace vegetable oils from the Far East. The need grows more acute daily.

Peanut oil has been used principally for food, and most of the increased production probably will be used to replace imported oils for shortenings, cooking fats, oleomargarine, and salad oils. But in an emergency it can be substituted for other oils that are used in making explosives, antifreeze, medicines, and other vital products.

The quantity of vegetable oil needed from the South can be produced only if the acreage of peanuts is increased two to three times. This increased acreage is needed for oil and there is little or no need for a larger acreage of edible nuts. In areas suited to their production, peanuts usually produce at least twice as much oil per acre as any other generally grown commercial crop.

The Federal Government has agreed to support prices of peanuts grown for oil in 1942, because of their importance

as an essential war material. Recent studies made by the U. S. Department of Agriculture and the State Experiment Stations in two of the principal peanut-producing areas, indicate that on the basis of these price floors and 85 percent parity for cotton, returns per man hour of labor should be about equal for cotton and for peanuts grown for oil in 1942. Returns from peanuts grown for oil should greatly exceed returns from corn or soybeans.

✕ Every part of the peanut plant can be used to advantage. The hay is better than stovers and grass hays as a source of protein, and has considerable market value. The meal left after the oil has been extracted from the nuts makes a high-protein feed for livestock.

Peanuts are well suited to the coastal plains of the Southern States and are also produced farther inland. The Virginia type is the favorite in southeastern Virginia and northeastern North Carolina, and is grown on light-textured, well-drained soils. The Spanish type is grown from the Atlantic to the Pacific - but principally in Georgia, Texas, Alabama, and Florida. It does well on both light and heavy



NO IDLE DAYS FOR PEANUT PICKERS THIS FALL

OIL MILLS ADAPTABLE

soils. The Runner type is grown commercially over a large area in Alabama, Florida, and Georgia.

With the cultural practices commonly followed throughout the peanut-growing area, this crop tends to deplete soil fertility. Therefore, special attention to soil-building practices is recommended. The roots of peanut plants store nitrogen from the air. If the digger is set in such a way that it will cut off these roots and leave them in the ground, they will help to maintain the nitrogen in the soil.

Peanuts should be grown in a definite rotation including at least two soil-improving crops such as vetch, cowpeas, bur clover, or lespedeza. If soybeans are used in the rotation peanuts should not follow them immediately. Wherever wind erosion is a problem, strip-cropping and use of a winter cover crop will prove desirable.

Peanuts should not be planted on land that is just being returned to cultivation after it has lain idle; but if there is idle cropland on your farm you may be able to use it to produce a feed crop and release other land for

planting peanuts. The Nation will need to use all its land wisely and well this year, to produce the food and fiber required for Victory.

The soil should be reasonably warm at planting time. Best results are obtained from planting in April or May, in a carefully prepared seedbed, but near the Gulf Coast Spanish peanuts planted up to July 1 yield fairly well.

It is especially important that peanuts be harvested within a week to 10 days after maturity—but not before they are mature. They should be harvested after the nuts are full grown and the inside of the shells has begun to color and show darkened veins—but before the vines are killed by frost.

It's a good plan to ask your county war board now for help in making sure that mechanical peanut pickers will be available when you need them. If your county expects to grow a large acreage, it may pay to set up a "clearing house" to arrange for full use of all available peanut pickers. Combines and small-grain separators can be adapted for use as peanut pickers. Cottonseed-crushing machinery can be



UNCLE SAM NEEDS FIVE MILLION ACRES OF PEANUTS

adapted easily for the production of peanut oil.

Your County Extension Agent or State Agricultural College can give you information on the best methods of planting, cultivating, and harvesting peanuts in your community. Ask for Farmers' Bulletin No. 1656 on Peanut Growing, or write directly to the U. S. Department of Agriculture, Washington, D. C., for a free copy.

Production of peanuts for oil is one of the greatest contributions that you, as a Southern farmer, can make this year toward winning the war.

Usual yield per acre of major oil crops and approximate quantity of oil per acre - Halifax County, N. C., and Sumter County, Ga.¹

Crop	Halifax County		Sumter County	
	Yield	Oil	Yield	Oil
	Lbs.	Lbs.	Lbs.	Lbs.
Peanuts	1,272	318	718	215
Cottonseed	510	79	380	59
Soybeans	822	123		

¹Virginia peanuts in Halifax County; Spanish peanuts in Sumter County.



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APR 1 1942



FARM MACHINERY GOES TO WAR

BAE—EXT FLIER—4
USDA

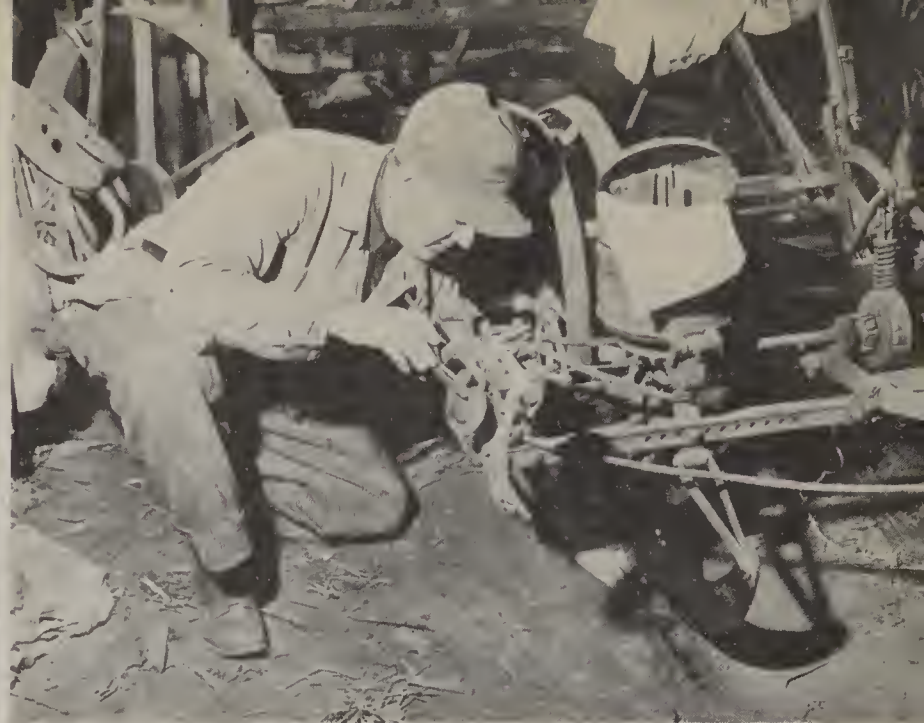


PROTECT EVERY MACHINE

We've got the toughest job in all our lives ahead of us; and we don't dare fail. Uncle Sam has promised farmers as many tools as can be spared from our metal supplies. He's agreed to the manufacture this year of four-fifths as much farm machinery as was sold in 1940. And he's going to allow the manufacture of half again as many repair parts as farmers bought in 1940.

Maybe it's still not as much machinery as some of us would like to have; but it's all that can be spared from planes and tanks and guns. The steel saved from the one-fifth reduction in number of machines is enough to make more than 6,000 30-ton tanks. And together with the implements already on farms, it should be plenty to grow the food and fiber required for Victory. That is, it should be plenty if we take care of it, and plan ahead to keep every machine busy, and work together with our neighbors.

To begin, we can fix up every old machine that can possibly be used. Someone is going to need it before long - maybe someone miles away - even if the present owner doesn't. A



ADJUST IT FOR LEAST WEAR AND TEAR

"rainy day" spent checking up on the condition of harvesting machinery may save lost time for a whole crew later on. Farm labor will be too scarce this year to waste it sitting around while repairs are made.

Every machine should be treated as though it may be the last one made. That means keeping it protected from weather and misuse. It means proper repairs at the proper time, plenty of grease and oil, shelter where available, reasonable loads and strains. And, your farm machinery dealer or local mechanic can tell you how to set your machinery to do any certain job with the least wear and tear.

But making machinery last longer is only half the job. We've got to keep it busy. Some machines can wear out about as fast just sitting idle as they do in use. By working them more hours a day, more days a year, we can save labor, earn money, and produce more of the stuff it will take to crush the Axis.

Machines that have been used only a few days a year can be kept on the

job by using them on a larger acreage on the same farm, or on neighboring farms. Take combines, for example. Some of them can be kept busy by using them for more crops - small grains first, then soybeans in the Corn Belt or dwarf grain sorghums in the Plains. You can add many other crops to the list - hay and grass seeds, for example (see your dealer). It may be possible to stretch out the harvesting season for some crops simply by planting at different dates, by planting two or more varieties that ripen at different dates, or by planting strong-stalked and nonshattering varieties.

You may have more machinery than you need; your neighbors may have less. Now is the time to get together with your neighbors and work out some plan for keeping your machinery busy. And once you've started sharing, don't forget to continue doing so next year. There's every reason to believe we'll need to produce still more next year - with less labor and very few new machines to replace the ones that wear out.

Most of us are going to learn a lot about real old-fashioned pioneer neighborliness during the months or

years ahead. There will be opportunities to double up on hauling supplies from town. Maybe you'll want to loan your neighbor a combine with the understanding that he'll help you to plow, this fall or next spring. There are many other ways that you and your neighbors can keep your machinery busy. Perhaps you can do custom work, hire some of your own work done or hire out your machinery to others. If some piece of equipment is particularly expensive or little used on one farm, you may want to buy shares in it, with your neighbors.

Under certain conditions, the Farm Security Administration loans money to farmers to buy machinery together; or it may loan the money to one man if he pledges to serve a group of his neighbors who, in turn, agree to rent the equipment. Some of the available new machinery can be well used in this way.

During and after the first World War, many a farmer plowed by moonlight. Harvesting crops under the glare of headlights has been practiced to a limited extent. These may become more common as ways of making full use of available equipment and labor.

SHARE MACHINERY WITH YOUR NEIGHBORS



USE COMBINES FOR MORE CROPS



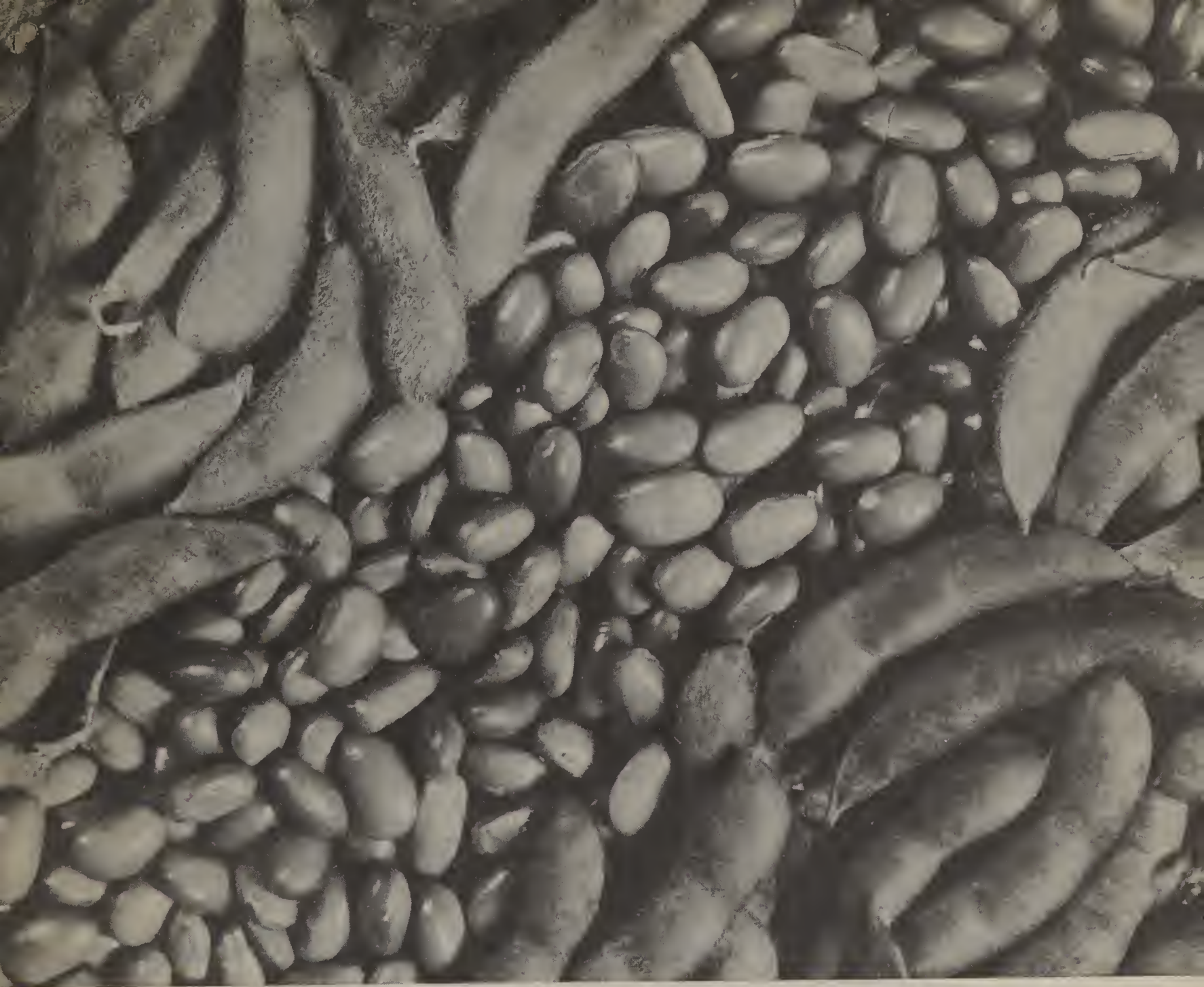


WE MUST MAKE REPAIRED MACHINES DO THE WORK OF NEW ONES

We all know that machinery will cost less per day of use if we work it more days in the year; but probably few of us realize just how much less. The following table shows that if certain types of farm machines were used twice as much as they are at present, the cost per day would be one-third less.

Estimated Daily Cost of Using Farm Machinery

Kind and Size of Machine	Machine Cost Per Day		
	With Average Use	Half Average Use	Twice Average Use
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Combine, 5-foot . . .	7.30	12.60	4.75
Tractor, general purpose 2-plow	5.00	6.50	4.00
Manure spreader . . .	1.25	2.00	.75
Grain binder, 6-foot .	4.50	8.50	3.00
Mower, 5-foot horse drawn	2.00	3.50	1.25

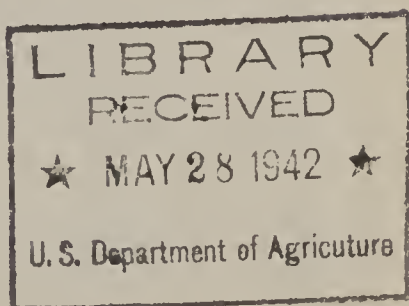


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GROW MORE SOYBEANS FOR VICTORY

SOYBEAN OIL AND THE WAR



BAE-EXT FLIER-5

USDA



SOYBEANS GROW WHERE CORN GROWS

Uncle Sam needs soybean oil - more soybeans than the farmers of America have ever produced - to win the war. We must replace a billion pounds of fats and oils cut off by war in the Far East. Then, too, our Allies have asked us to send them a billion pounds or more of fats and oils this year. Thus our farmers have the job of producing millions of pounds more oils and fats this year than they did last year.

One way you can do your part is by growing more soybeans. The Secretary of Agriculture has asked American farmers to grow at least 9 million acres of soybeans for harvest as beans - 10 million if possible - as compared with less than 6 million acres harvested last year. If farmers reach this goal, they will supply 300 to 500 million pounds more soybean oil than they supplied last year.

What will all this soybean oil be used for? Most of it will go into food - into salad oils, cooking fats, and oleomargarine. We need more foods like these in wartime because they are rich in what it takes to make soldiers fight their best, and to make the rest of us work our hardest. Then much of



COMBINES HARVEST SOYBEANS BEST

the soybean oil you grow will be used for paints and varnishes to protect ships, guns, tanks, and planes. Some of it will go into soap. Soybean oil is even used in making glycerine - and from glycerine come explosives to blast the enemy.

Nor is the oil the only useful part of the soybean. The meal left over after the oil has been extracted from the bean is becoming more and more popular as high-protein feed for livestock. Remember - with our country's need for more livestock, we'll need all the feed we can get. Out of the meal can also be made foods such as flour, macaroni, crackers; water paint and vegetable glue; and even plastics to take the place of metals that have gone to war.

The Federal Government has promised to support the price of soybeans grown for oil this year because of their importance as a war material. Right now, prices of soybeans grown for oil are the highest they have ever been, or almost twice the average price received by growers in recent years. Results of a recent study show that returns from soybeans grown for



BEANS ARE CRUSHED INTO OIL

oil in the South are a good deal higher than returns from corn and oats. This study showed that net returns per acre were about \$17 for soybeans, \$9 for corn, and \$13 for oats. In other parts of the country, returns from soybeans grown for oil are usually higher than returns from oats and almost equal to returns from corn.

Soybeans grow well in the same climate as corn. They are especially well suited to the northern half of the Cotton Belt and the central part of the Corn Belt. States producing the most soybeans are Illinois, Iowa, Indiana, Ohio, Missouri, and North Carolina. Farmers in these and neighboring States who have not grown soybeans should do so this year. Those who have grown soybeans should grow more this year.

Nearly all types of soil will grow soybeans. Fertilizers should be used in sandy soil or soils of low fertility. When soybeans are sown on land for the first time, it is well to inoculate the soil. The best time for seeding is about or shortly after corn-planting time, when the ground has



SOYBEANS HAVE MANY FOOD USES

become thoroughly warm. Soybeans grow best on a well-prepared seedbed.

You may grow soybeans in rotation with many other crops just as you would corn. In places where cowpeas are grown, soybeans fit into practically the same place in rotations as do cowpeas. A good rotation for many places north of the Ohio River is corn, soybeans, wheat, and clover. In the South, oats can follow soybeans.

The time to harvest soybeans depends on how you are going to harvest them. If you do not use a special bean harvester or combine, the best time to harvest is when the pods are fully mature and after the leaves have fallen. If you use a special bean harvester or combine, wait for the seed itself to reach full maturity. Soybean seed should be thoroughly dried before it is stored.

Your Government is making every effort to see that there will be enough machines to harvest the increased acreage of soybeans. If there is not enough harvesting equipment in your neighborhood, your county's USDA



UNCLE SAM NEEDS 9 MILLION ACRES OF SOYBEANS FOR OIL THIS YEAR

War Board will no doubt bring outside machines into your community. That's why it's a good idea to see your War Board now to make sure that harvesting equipment will be there when you need it.

If you would like to know more about how to plant, cultivate, and harvest soybeans, see your County Agricultural Agent or ask your State Agricultural College. Or write the U. S. Department of Agriculture, Washington, D. C. for free copies of *Farmers' Bulletin No. 1520 on Soybeans (Culture and Varieties)*, No. 1605 on

Soybean Hay and Seed Production, and No. 1617 on *Soybean Utilization*.

We are all in this war together. Each of us must do his part. You may not be able to fly a bomber or fire a gun from a battleship. You will not have to make any sacrifices that can compare with those made by the men in the Philippines. But one thing you can do is to help meet your country's wartime need for fats and oils by growing more soybeans for harvest as beans. Remember - when you grow more soybeans, you are helping America to destroy the enemies of freedom.

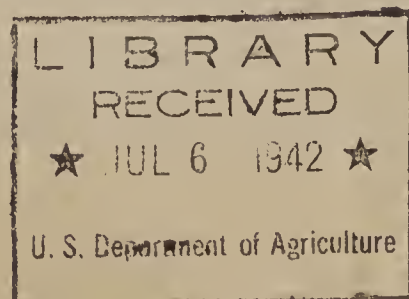


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FARM HORSES AND MULES WILL HELP WIN

BAE—EXT FLIER—6

USDA



War has called our farm horses and mules to the colors. With steel and rubber and fuel needed for planes and tanks and guns, farmers are going to get less machinery than they bought last year. And with Uncle Sam calling for the largest crop year in history, farmers will want to make the best possible use of every horse and mule.

We have today fewer than 14 million horses and mules, about 12 million of which are old enough to work. We also have about 1,450,000 tractors on farms, and more than 1,000,000 motor-trucks. What we must do is to keep both horses and machines busy, and to use each type of power for the purposes for which it is best suited.

Horses, like men, can work harder than usual in emergencies. Many horses have been working only 500 or 600 hours a year during peacetime. Now they can be worked many more hours, provided they are gradually hardened to work, fed correctly, and cared for properly. Young animals can be put to work sooner than usual, if the need arises. Although we usually do not think a horse is well broken and hardened until he is 4 years old, the fact is that well-conditioned colts can do some work at 2 and 3 years of age. Well-developed draft colts can be broken the fall following their second birthday, and can do moderate work the next spring or summer.

One of the most important things the American farmer can do right now is to put every horse, every mule, and every machine to the jobs for which it is best fitted. Some of the jobs that horses may well be called upon to help with more and more are preparing the land, cultivating, and harvesting. They may even be used more than they have been to haul products to market and supplies from town.

You may have some horses, and your neighbor may have a tractor. Why not get together with your neighbor

and work out a plan for keeping his machine and your horses busy? Isn't it common sense that if two men, each driving one horse, can combine the two horses into one team which one man can drive - and if this team can do as much or more work than the two did singly - the horses should be teamed to save one man's time? And wouldn't it often be wise to combine two of these two-horse teams into one four-horse team, and save another man's time? There are few farm horses that cannot be trained in a few days' time to work in large teams.

But if horses and mules are to work harder for victory, they must be well cared for. You know that this means training your animals for heavy work gradually, by giving them more and more work during a special "fitting period." Every-day work hardens farm horses, just as the daily training given to athletes puts them in shape to win. And of course it means warming up your horses slowly at the beginning of each day's work. Then it pays to see that harnesses are kept in good repair and that all parts, especially the collars, fit comfortably.

Every good horseman knows that proper care also means matching teams carefully so that you do not work a slow horse or mule with a fast one. It means giving them a little water and salt often, rather than too much at any one time. It means checking their teeth to be sure that they are in condition to chew grain and hay, and keeping their feet in good shape by regular trimming and shoeing. It means grooming them at night to get rid of body waste, for then they will rest better. Internal parasites such as bots should be kept under control by preventive measures and medicinal treatment, and the animals should be kept free of lice and mites.

Above all, you know that good care includes good feeding. During the



PLENTY OF JOBS FOR HORSES, MULES

winter, many farmers give their horses the run of cornstalk fields, grain-stubble fields, or pastures—but feed them little if any grain. As the work season draws near, this should be changed gradually so that by the time light work begins, the horse gets daily a pound of good hay and about a pound of grain for each hundred pounds of its body weight. Corn and oats are the most common grains used for feeding work horses and mules during the fitting and working seasons, but barley—if rolled, ground, or crushed—may be used partly to take the place of corn and oats. Wheat bran and linseed meal may be added, especially if the horses and mules are in poor condition. If you are in the South, you may want to feed about a pound of cottonseed meal and some cottonseed hulls in addition to the grain and hay.

Timothy alone, or timothy with clover, is probably the best hay to feed, in many places. Prairie or Johnson grass may also be used. So may some of the legumes such as clover, alfalfa, cowpeas, lespedeza, or soybeans, but feeders advise that you not use these for more than half the total quantity of hay you give your horses.



PLENTY FOR MACHINES

But even with the best of care, the average horse will reach the end of his period of greatest usefulness at around 15 years of age, the average mule at around 18 years. Farmers have not been raising enough horses and mules to replace those they now have. There are only about three-fourths as many horse foals and only about two-thirds as many mule foals as are needed to maintain the number of horses and mules on farms today. The question facing many farmers who will want new horses is whether to raise their own or buy them from other farmers.

Prices of horses and mules are going up, and may continue to do so for some time. The average price per horse on March 15, 1942, was \$80, as compared with \$70 a year earlier, and \$65 at the start of this year. The average price per mule was \$100, as against \$89 a year ago. What the price will be 4 or 5 years from now, no one can say. But farmers who are not too much interested in the prices their animals will bring when mature—especially those farmers with cheap pastures and plenty of roughage—will want to think now about raising more colts. Although we need more pork,



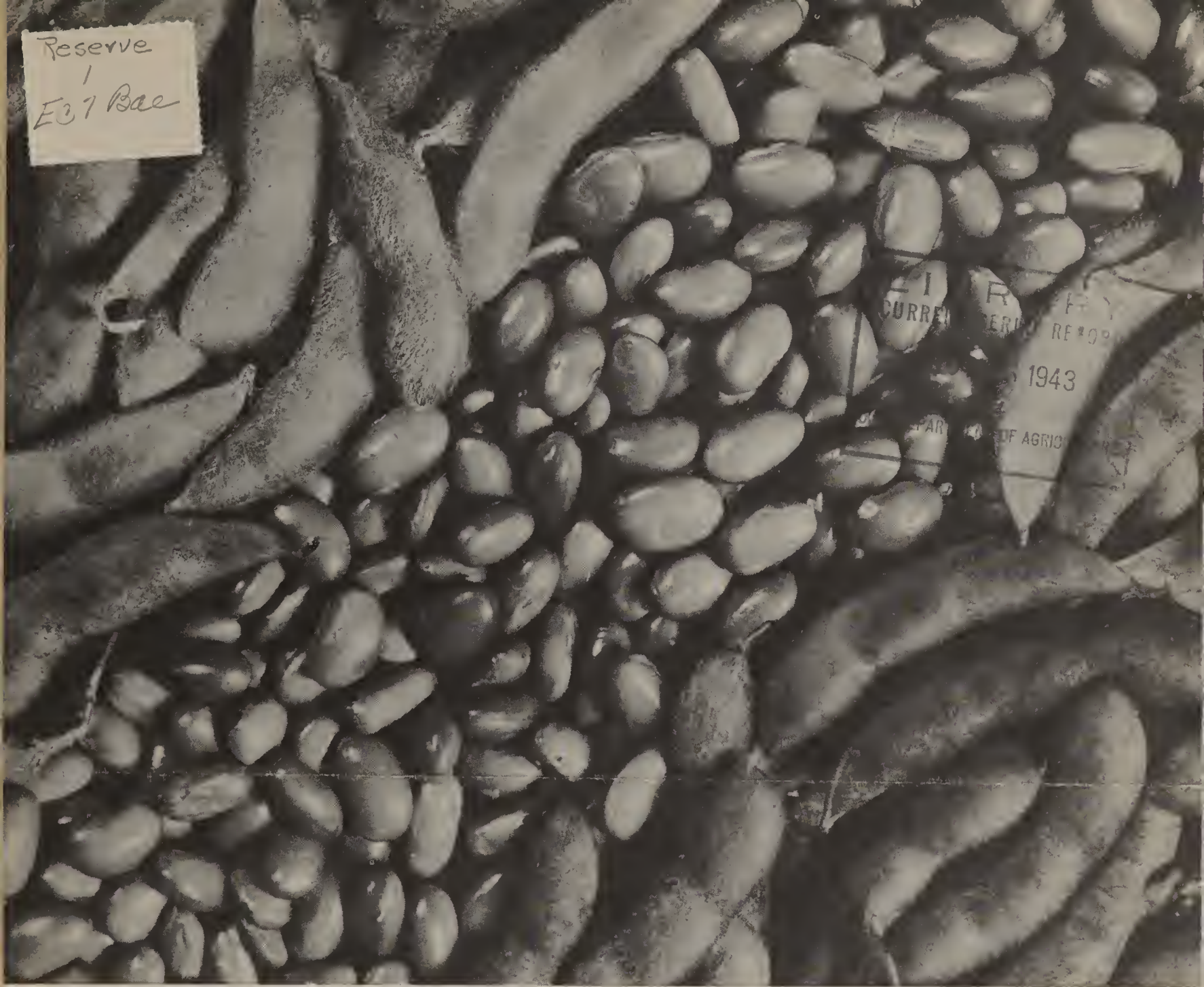
WE NEED MORE COLTS TO REPLACE WORK STOCK

milk, and beef than ever before, many farmers will find an opportunity to raise colts. Remember—good brood mares can do the work that is to be done on many farms and can raise colts as well. Thus they are creating new power at the same time they are performing their everyday tasks. Farmers who use such mares are in a position to sell any extra colts to other farmers who do not raise their own.

For more about the proper care of horses and mules, write the U. S. Department of Agriculture, Washington, D. C. for Farmers' Bulletins No. 1419 on "Care and Management of Farm Work Horses," No. 1030 on "Feeding Horses," No. 1368 on "Breaking and Training Colts," No. 803 on "Horse Breeding Suggestions for Farmers," and No. 1535 on "Farm Horse Shoeing."

More horses and mules may be raised during the next few years. But the colts that are born this year will not be able to do much work until 3 or 4 years later. In the meantime, it is up to the farmers of America to take the best possible care of each horse and mule, and to plan ahead to keep every animal busy, and to work together with their neighbors for victory.

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GROW MORE SOYBEANS FOR VICTORY

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SOYBEANS GO TO WAR

BAE-EXT FLIER-7
USDA



SOYBEANS GROW WHERE CORN GROWS

To win the war Uncle Sam needs soybeans - more soybeans than the farmers of America have ever produced. Millions of acres beyond peacetime production must be grown and harvested.

How will all these soybeans be used? Because of their high nutrient value most of the soybeans will go into human food and livestock feed.

Oil crushed from the beans goes into salad oils, oleomargarine, cooking fats, and other foods rich in energy and fat. From the meal left over after the oil is removed are made flour, breakfast foods, macaroni, infant foods, crackers, and a whole new line of foods rich in proteins, vitamins, minerals. More and more of these foods are needed, especially in wartime. Even the whole bean is used more widely in an ever increasing variety of dishes.

Meal also is badly needed as high-protein feed for livestock. Expansion of livestock production since the war began has created an unprecedented demand for all the high-protein feed produced. More soybeans will help to satisfy this demand.

Some soybean oil will go into paints and varnishes to protect ships

ONE WAY TO HARVEST SOYBEANS

and tanks and planes and guns. Some of it will go into soap and glycerine - and from glycerine are made explosives to blast the enemy.

Where will all these soybeans be grown? They are particularly well suited to the central part of the Corn Belt and northern half of the Cotton Belt. In fact, nearly three-fourths of the total acreage harvested for beans now is in four States - Illinois, Iowa, Indiana, and Ohio. But these States have room enough to grow only half of all the soybeans needed and still produce other vital war crops. A large share of the additional acreage will have to come from other States in the "Soybean Belt," as well as from the Northeastern, Appalachian, and Great Plains States.

In many areas returns from soybeans grown for oil are usually higher than those from oats and nearly equal to those from corn. In the South returns from soybeans are much higher than those from either corn or oats. Because of their war importance, the Federal Government will support the price of soybeans harvested for beans.

Like other legumes, soybeans grow in nearly all types of soil but higher



BEANS ARE NEEDED FOR OIL

yields are obtained on those which are improved. Liming acid soils and fertilizing poorer soils mean higher yields. For best results land used the first time for growing soybeans must be inoculated - a rather simple operation. Once a tract of land is inoculated, this practice need not be repeated for several years if soybeans are grown occasionally on it.

Good soybean growth is dependent upon thorough cultivation to insure a head start over the weeds. The seedbed is best prepared by fall or early spring plowing followed by frequent harrowings before seeding. This controls the weeds to a great extent and insures a loose covering of fine soil to promote even seeding and good plant development. Seeding soybeans in drills or in rows wide enough to cultivate are common practices. Fortunately, soybeans are fairly free from serious insect pests.

As with corn, there are many varieties of soybeans adapted to local soil and climatic conditions and harvesting practices. These varieties range in maturity from 75 to 200 days. The variety used will be important in deciding the time to plant, but soybeans germinate and grow faster after the



SOYBEANS HAVE MANY FOOD USES

soil has become warm. Usually the best time to sow soybeans is at corn-planting time when conditions are favorable.

Yellow-bean varieties yield the most oil. Green or yellowish-green beans are most suitable for drying as edible beans because they cook more easily and have a mild nutty flavor. Brown and black-bean varieties are best adapted for forage because these plants are finer stemmed and more leafy. Hence the yellow and green varieties, most needed now, are the ones to plant.

Soybeans may be grown in rotation with other crops, just as in the case of corn. In areas where cowpeas are grown, soybeans fit into practically the same place in rotations as do cowpeas. North of the Ohio River a good crop rotation is corn, soybeans, wheat, clover. In the South, oats can follow soybeans.

Time to harvest soybeans depends on equipment used. If a special harvester or combine is *not* used, the best time is when the pods are mature but before there will be much loss from shattering. If a special harvester or combine is used, harvest should wait until the beans reach full maturity.



UNCLE SAM NEEDS MILLIONS OF ACRES OF SOYBEANS FOR BEANS EACH YEAR

Soybeans should be thoroughly dried before storing, to prevent mold.

The Government is making every effort to assure enough machines for harvesting the increased acreage of soybeans. But if a farmer does not have harvesting equipment, it is a good idea to see the County War Board to make sure there will be equipment when needed.

Additional information on how to plant, cultivate, and harvest soybeans, may be obtained from the County Agricultural Agent in each county, from any State Agricultural College, or from the U. S. Department of Agriculture in Washington, D. C. Free copies of the

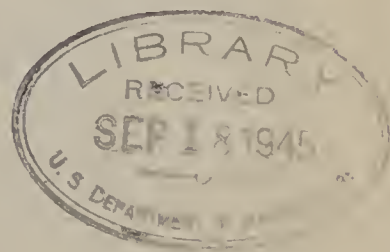
following Farmers' Bulletins are available: No. 1520 on Soybeans - Culture and Varieties, No. 1605 on Soybean Hay and Seed Production, and No. 1617 on Soybean Utilization.

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All free people are in this war together. Each must do his part. Not everyone can fly a bomber or fire a gun. And few have to make sacrifices comparable to those made by the men at the battle fronts. But one thing American farmers can do to help meet their country's war need for food, feed, and oils is to grow more soybeans for harvest as beans.



GROW MORE SOYBEANS FOR VICTORY



**SOYBEAN OIL
AND THE WAR**

BAE-EXT FLIER-5

USDA



SOYBEANS GROW WHERE CORN GROWS

Uncle Sam needs soybean oil - more soybeans than the farmers of America have ever produced - to win the war. We must replace a billion pounds of fats and oils cut off by war in the Far East. Then, too, our Allies have asked us to send them a billion pounds or more of fats and oils this year. Thus our farmers have the job of producing millions of pounds more oils and fats this year than they did last year.

One way you can do your part is by growing more soybeans. The Secretary of Agriculture has asked American farmers to grow at least 9 million acres of soybeans for harvest as beans - 10 million if possible - as compared with less than 6 million acres harvested last year. If farmers reach this goal, they will supply 300 to 500 million pounds more soybean oil than they supplied last year.

What will all this soybean oil be used for? Most of it will go into food - into salad oils, cooking fats, and oleomargarine. We need more foods like these in wartime because they are rich in what it takes to make soldiers fight their best, and to make the rest of us work our hardest. Then much of



COMBINES HARVEST SOYBEANS BEST

the soybean oil you grow will be used for paints and varnishes to protect ships, guns, tanks, and planes. Some of it will go into soap. Soybean oil is even used in making glycerine - and from glycerine come explosives to blast the enemy.

Nor is the oil the only useful part of the soybean. The meal left over after the oil has been extracted from the bean is becoming more and more popular as high-protein feed for livestock. Remember - with our country's need for more livestock, we'll need all the feed we can get. Out of the meal can also be made foods such as flour, macaroni, crackers; water paint and vegetable glue; and even plastics to take the place of metals that have gone to war.

The Federal Government has promised to support the price of soybeans grown for oil this year because of their importance as a war material. Right now, prices of soybeans grown for oil are the highest they have ever been, or almost twice the average price received by growers in recent years. Results of a recent study show that returns from soybeans grown for



BEANS ARE CRUSHED INTO OIL

oil in the South are a good deal higher than returns from corn and oats. This study showed that net returns per acre were about \$17 for soybeans, \$9 for corn, and \$13 for oats. In other parts of the country, returns from soybeans grown for oil are usually higher than returns from oats and almost equal to returns from corn.

Soybeans grow well in the same climate as corn. They are especially well suited to the northern half of the Cotton Belt and the central part of the Corn Belt. States producing the most soybeans are Illinois, Iowa, Indiana, Ohio, Missouri, and North Carolina. Farmers in these and neighboring States who have not grown soybeans should do so this year. Those who have grown soybeans should grow more this year.

Nearly all types of soil will grow soybeans. Fertilizers should be used in sandy soil or soils of low fertility. When soybeans are sown on land for the first time, it is well to inoculate the soil. The best time for seeding is about or shortly after corn-planting time, when the ground has



SOYBEANS HAVE MANY FOOD USES

become thoroughly warm. Soybeans grow best on a well-prepared seedbed.

You may grow soybeans in rotation with many other crops just as you would corn. In places where cowpeas are grown, soybeans fit into practically the same place in rotations as do cowpeas. A good rotation for many places north of the Ohio River is corn, soybeans, wheat, and clover. In the South, oats can follow soybeans.

The time to harvest soybeans depends on how you are going to harvest them. If you do not use a special bean harvester or combine, the best time to harvest is when the pods are fully mature and after the leaves have fallen. If you use a special bean harvester or combine, wait for the seed itself to reach full maturity. Soybean seed should be thoroughly dried before it is stored.

Your Government is making every effort to see that there will be enough machines to harvest the increased acreage of soybeans. If there is not enough harvesting equipment in your neighborhood, your county's USDA



UNCLE SAM NEEDS 9 MILLION ACRES OF SOYBEANS FOR OIL THIS YEAR

War Board will no doubt bring outside machines into your community. That's why it's a good idea to see your War Board now to make sure that harvesting equipment will be there when you need it.

If you would like to know more about how to plant, cultivate, and harvest soybeans, see your County Agricultural Agent or ask your State Agricultural College. Or write the U. S. Department of Agriculture, Washington, D. C. for free copies of *Farmers' Bulletin No. 1520 on Soybeans (Culture and Varieties)*, No. 1605 on

Soybean Hay and Seed Production, and No. 1617 on *Soybean Utilization*.

We are all in this war together. Each of us must do his part. You may not be able to fly a bomber or fire a gun from a battleship. You will not have to make any sacrifices that can compare with those made by the men in the Philippines. But one thing you can do is to help meet your country's wartime need for fats and oils by growing more soybeans for harvest as beans. Remember - when you grow more soybeans, you are helping America to destroy the enemies of freedom.